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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,641	10/09/2001	Robert Addison Boudreau	17605-A	9723

7590 01/30/2004
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EXAMINER

CHEN, KIN CHAN

ART UNIT	PAPER NUMBER
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1765

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,641

Applicant(s)

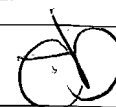
BOUDREAU ET AL.

Examiner

Kin-Chan Chen

Art Unit

1765



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election of group 1, a method (December 24, 2003) is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Applicant renumbered claims 8 through 23 to claims 7-24 is acknowledged. Claim 20 (originally, before renumbering, was claim 19), also a product claim, properly belongs in group II, hence, is drawn to a non-elected claim for the same reasons set forth in the previous office action (October 2, 2003). Therefore, the product claims (claims 20-24) are withdrawn; the method claims (claims 1-19) will be prosecuted.

Drawings

2. New corrected drawings are required in this application because Fig.1 is informal and Figs 2 and 3 are not clear as to various levels and depths into the substrate. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "said waveguide" in line 5, "said optical device" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dautartas et al. (US 5,550,088; hereinafter "Dautartas") in view of Vieider et al. (US 6,516,448; hereinafter "Vieider").

Dautartas teaches a method for preparing a substrate having alignment features for optical components. The substrate may have x, y, z, orientation and substrate surface along an xz plane. The substrate may have a specific point thereon. A stop etch mask may be applied to a substrate. The mask defines the location on the substrate for

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receiving the waveguide and one or more locations (so-called fiducials in the claimed invention) for positioning the optical device on the substrate relative to the waveguide. The substrate may be etched to define the fiducials and openings. The openings being dimensioned to receive at least a portion of a waveguide and enable the optical device to be positioned on the substrate such that they are optically aligned (abstract, col.5, lines 44 through col. 6, lines 40; Figures).

Unlike the claimed invention, Dautartas does not explicitly state that the openings being etched is groove (more specifically U-groove). However, U-groove is one of most popular openings etched for receiving the waveguide. Vieider is relied on to show that the substrate is etched to form U-groove for receiving the waveguide in order to have high degree of precision with respect to groove width and length for accommodate waveguide (abstract, col. 2, lines 17-47). Hence, it would have been obvious to one with ordinary skilled in the art to use U-groove of Vieider in the process of Dautartas in order to have high degree of precision with respect to groove width and length for accommodate waveguide.

The above-cited claims differ from the combined prior art by specifying well-known features and conventional methods (such as etching process in claims 2, 3) to the art of optoelectronic device fabrication. It is the examiner's position that a person having ordinary skill in the art at the time of the claimed invention would have found it obvious to modify the combined prior art by adding any of same well-known features and conventional process to same in order to provide their art recognized advantages and produce an expected result.

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The above-cited dependant claims (such as claim 4, 6, 7, 9-13, 17) differ from the combined prior art by specifying various sizes, dimensions, duplication of parts, or relative locations. Because same are merely a matter of choices of design depending on the specific product requirements, it would be obvious to one skilled in the art to use various dimensions and design rules for fabricating a optoelectronic device in order to accommodate the specific product design and meet the product requirement.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kin-Chan Chen whose telephone number is (571) 272-1461. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0988.

January 22, 2004



Kin-Chan Chen
Primary Examiner
Art Unit 1765